

Work Order ID 62280

September 24, 2010 1:56:56 PM

Item ID: D206-642-541

Accept

Setup Start

Stop

Revision ID:

Item Name: Replacement Skidtube

Start Date: 9/24/10 Start Qty: 1.00

Required Date: 10/08/10 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Run Start

Stop

Approvals:

Process Plan: *CL*

Date: 10/9/24

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3274	D
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IIN-D206-642	Rev M
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0.00

100



DC

Document Control

DOCUMENT CONTROL

0.00

Memo

Photocopy bluefile & type labels per PPP D206-642-541

CHG003

N/A CL 10/12/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Process Plan:

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Date:

Stop



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Date:

SPC (Y/N):

Date:

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--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Skidtubes

0.00

Skidtubes

Skidtubes

Memo

****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE****

1- Bend FWD end of tube using bend prog D3274 FWD and foil 10 as per dwg D3274, cut fwd end of tube with saw table setup D3274.

2- remove fwd indexing ridge as per dwg D3274. Prepare for welding

3- weld fwd cap as per dwg D3274 and QSI004
AR Aluminum Rod Batch: M112507

4- grind fwd cap weld on top surface only

5- Cut AFT end of tube at 170.9" as per dwg D3274 and deburr end.

6-Drill Aft cap pilot hole using DT8025

7 -Cleco DT8025 in position and install pilot hole drill Jig DT8742A,B,C,D.
Drill 3/16" pilot holes as per Dwg D32748 -Remove inner indexing ridge on aft end of skidtube as per Dwg D3274 scribe
batch #

9 -Open aft end cap holes to Ø0.208" as per Dwg D3274. Deburr aft end.

10-10-4

BE 10-10-5

BE 10-10-5

BE 10-10-5

BE 10/10/05

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				1			BE 10/10/05
130  QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00							8 10/10/05
140  QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							8 10/10/05

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Reference:						
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start
	QC:	Date:	SPC (Y/N):	Date:		Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Skidtubes	0.00							
	Skidtubes	0.00							
Skidtubes	<p>Memo</p> <p>1-Open Ø0.313" and 0.375" crossbolt spacer holes using DT8743 as per Dwg D3274</p> <p>2-Deburr crossbolt spacer holes as per Dwg D3274 and blow out chips from inside the tube</p> <p>3-Bond web in place as per Dwg D3274 & QSI 015.</p> <p>A/R <input type="checkbox"/> Sikaflex-291 <input type="checkbox"/> <u>11/5/10</u> <input type="checkbox"/></p> <p>Sikaflex expire date: <input type="checkbox"/> <u>11/01/20</u> <input type="checkbox"/></p> <p>Start: <input type="checkbox"/> <u>10/10/09</u> <input type="checkbox"/> Time: <input type="checkbox"/> <u>11:00</u> <input type="checkbox"/></p> <p>Finish: <input type="checkbox"/> <u>10/10/09</u> <input type="checkbox"/> Time: <input type="checkbox"/> <u>11:30am</u> <input type="checkbox"/></p> <p>(Adhere for 12 hours)</p>								<p><i>Handwritten:</i> > DP 10-10-6</p> <p><i>Handwritten:</i> (X) BB 10/11/04</p>
160	QC5- Inspect part completeness to step on W/O	0.00							
	QC	0.00							
Quality Control	Memo								

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Reference:						
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start
	QC:	Date:	SPC (Y/N):	Date:		Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	1-Bend AFT end of tube using bend prog. D3274 AFT as per dwg D3274. Install drop pins in crossbolt spacer holes to maintain web position.								DP 10-11-8
	2- DRILL PILOT HOLES FOR WEARPLATES USING D3274-1T2 OPEN HOLES TO .297" . Deburr								
	3-DRILL TOE PIN HOLE .640" DIA AS PER DWG USING DT8935 FWD END OF TUBE DEBURR INSIDE OF HOLE AS NECESSARY (DO NOT ENLARGE HOLES) REMOVE ANY FOREIGN OBJECTS INSIDE OF TUBES								DP 10-11-8
	4- Countersink crossbolt spacer holes as per Dwg D3274								
	5- prepare for welding								
180 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									h2 24.7° h2 29.25" Solulus

W/O:		WORK ORDER CHANGES					
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Accept

**Setup Start**

Stop



Start Date: 9/24/10 **Start Qty:** 1.00

**Cust Item ID:**

Required Date: 10/08/10 **Req'd Qty:** 1.00

Customer:

Reference:

Run Start



Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190



Skidtubes

Skidtubes

Skidtubes

0.00

Memo

0.00

1-Insert D2649 & D3275-1 crossbolt spacers. Weld as per QSI 004 and Dwg D3274. Remember to back drill each hole before welding the other side. Use aluminum rod
A/R ☐ Aluminum Rod ☐ *m111385* *06 10/11/11*

3-Grind cross bolt welds flush as per Dwg D3274.

4-Counterbore 5/16" x 0.750" deep as per Dwg D3274 and deburr.

200



QC

Quality Control

QC5- Inspect part completeness to step on W/O	0.00
-----------------------------------------------	------

0.00

Memo

0.00

710445

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Cust Item ID:

Required Date: 10/08/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

220

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

✓ Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

230

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 8:00
OVEN TEMPERATURE: 320
FINISH TIME: 8:30

1 BL 10-11-18.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

240

QC3- Inspect Part Finish

0.00 => M 10/11/18

QC

Memo

0.00

Quality Control

250

HandFinishing

0.00

HandFinish

Memo

0.00

Hand Finishing

1-Install Nut Plate as per Dwg D3274. Apply LPS-3 to Nut Plate and rivets.
A/R ☐ N/A ☐ LPS-3 ☐ M109956

=> M 10/11/18

2-Install inserts as per Dwg D3274. Use a drop of Sikaflex inside insert holes a
A/R ☐ ☐ Sikaflex-291 ☐ M1115/18
Sikaflex expire date: ☐ 11/01

260

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

Inspect Nut Plate & Inserts

M 10 11 18 (1)

W/O:		WORK ORDER CHANGES					
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Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

270



HandFinish

Hand Finishing

HAND FINISHING RESOURCE #1

0.00

0.00

10/11/18

1



Memo

✓ 1-Install wearpads & gaskets as per Dwg D3274.

✓ 2-Install ring as per Dwg D3274

A/R ☐ Sikaflex-291 ☐ 11/15/14

Sikaflex expire date: ☐ 11/01

✓ 3-Inspect for foreign objects as per QSI 024

✓ 4-Spray inside of tube on both sides of web with LPS-3

A/R LPS-3 Batch: N/A

5-Install Aft Cap and seal with Sikaflex. Clean excess adhesive.

A/R ☐ Sikaflex-291 ☐ 11/15/14

✓ Sikaflex expire date: ☐ 11/01

280



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

10/11/18

40

Memo

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Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

290

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

PM63383

0.00

Packaging

300

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

CK 10/12/13
MF
10-12-10

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Picklist Print

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Parent Item Name: Replacement Skidtube

Start Date: 9/24/10


Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B 05.09.23 Revised per D206-642 Rev. J KJ/JLM
 IPP Rev:C 07-02-23 Added SS Wearplates & Gaskets JLM
 IPP Rev:D 07-12-06 replace NAS1515H3L to D3672-1 DD
 IPP Rev:E 08-04-17 as per PAR 08-015 DD verified by:EC
 IPP Rev:F 08-06-02 add comment DD verified by:EC
 IPP Rev:G 08-10-09 revise details DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2600-1-190

 Extrusion Round 3" 206

Manufactured No

110

Each

74.0000

1

1

Location

Loc Qty

Loc Code

LG

74

47575

26

59874

48

① DD 10-10-4

D3285-1

 Cap

Manufactured No

110

Each

141.0000

1

1

Location

Loc Qty

Loc Code

LG

141

52511

74

52647

67

1 BE 10-10-4

D3282-041

 Float Web (206L/407)

Manufactured No

150

Each

3.0000

1

1

Location

Loc Qty

Loc Code

LG

3

59886

3

60931

① BB 10/11/04

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Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

190

Each

107.0000

1

1



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG

107

58545

2

60652

4

61496

101



B63359 12 BBW/11/11

D3275-1

Manufactured No

190

Each

184.0000

12

12



Crossbolt Spacer

Location

Loc Qty

Loc Code

LG

184

53453

8

60653

3

61646

173



B62399 12 BBW/11/11

CR3212-4-03

Purchased No

250

Each

1,898.000

2

2



Cherry Rivet

Location

Loc Qty

Loc Code

ST311

1898

111359

5

112314

2

114436

448

114450

77

114859

1366



10/11/18

D3415-041

Manufactured No

250

Each

55.0000

1

1



Nut Plate

Location

Loc Qty

Loc Code

ST056

55

33842

55



10/11/18

X1

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Shop Packet Print

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Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-3

Purchased

No

250

Each

456.0000

2

2



Cherry Rivet



HL 10/11/18

Location

Loc Qty

Loc Code

ST311

456

112314

4

113539

44

113973

408

X2

ALS4-1032-130

Purchased

No

250

Each

2,044.000

78

78



Insert



HL 10/11/18

Location

Loc Qty

Loc Code

PKG11

1995

114723

1995

ST282

10

110511

10

ST381

39

114654

39

V78

D3536-15

Manufactured

No

270

Each

17.0000

1

1



Gasket



HL 10/11/18

Location

Loc Qty

Loc Code

FP

16

56055

4

60875

12

FP11

1

59238

1

B62459

Y1

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Shop Packet Print

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

September 24, 2010 1:56:56 PM

Page 4

Work Order ID: 62280

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube



Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3536-23

Manufactured No

270 Each 15.0000



Gasket



XL 10/11/18

Location

Loc Qty

Loc Code

FP011

15

B62238

60234

4

XL

61237

11

XL

D3536-35

Manufactured No

270 Each 16.0000



Gasket



XL 10/11/18

Location

Loc Qty

Loc Code

FP012

16

B63579

58683

1

XL

60235

3

XL

61692

12

XL

D3536-39

Manufactured No

270 Each 15.0000



Gasket



XL 10/11/18

Location

Loc Qty

Loc Code

FP12

15

58215

1

XL

58571

14

XL

D3535-15

Manufactured No

270 Each 13.0000



Wearshoe



XL 10/11/18

Location

Loc Qty

Loc Code

FP18

13

B62707

61241

13

XL

September 24, 2010 1:56:56 PM

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Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 62280

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3535-35

Manufactured No

270

Each

13.0000

1

1



Wearshoe



xl 10/11/10

Location

Loc Qty

Loc Code

FP018

13

1362461

xl

60865

13

D3535-39

Manufactured No

270

Each

19.0000

1

1



Wearshoe



xl 10/11/10

Location

Loc Qty

Loc Code

FP18

19

58214

2

60233

17

xl

D3535-23

Manufactured No

270

Each

25.0000

1

1



Wearshoe



xl 10/11/10

Location

Loc Qty

Loc Code

FP

12

1362706

xl

61830

12

FP021

23

60231

11

FP21

2

60864

2

D3537-3

Manufactured No

270

Each

18.0000

1

1



Wearpad



xl 10/11/10

Location

Loc Qty

Loc Code

FP17

17

60866

17

1361674

xl

FP19

1

59711

1

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Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 62280

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured No

270

Each

87.0000

9

9



Wearpad



9/10/10

Location

Loc Qty

Loc Code

FP

1

362928

x9

55465

1

FP17

86

57713

3

60491

3

61640

80

AN960C10L

NAS1149C0332

Purchased

No

270

Each

29.0000

80

80



washer

M115832



x80 9/10/10

Location

Loc Qty

Loc Code

ST245

29

107534

29

AN960C416

NAS1149C0463

Purchased

No

270

Each

103.0000

1

1



washer

M115358



x1 9/10/10

Location

Loc Qty

Loc Code

ST346

103

100993

103

D3672-1

Manufactured

No

270

Each

869.0000

2

2



Phenolic Washer



9/10/10

Location

Loc Qty

Loc Code

ST077

869

42329

150

52505

719

x2

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Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 62280

Parent Item: D206-642-541

Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

2,108.000

80

80



BOLT



x 270 10/11/10

Location

Loc Qty

Loc Code

ST245

38

109061

11

110139

27

ST303

42

115438

42

ST350

2028

114108

14

114416

12

114523

2

115300

1000

115589

1000

x 80

AN4C5A

Purchased

No

270

Each

495.0000

1

1



BOLT



x 1 10/11/10

Location

Loc Qty

Loc Code

ST346

495

110552

7

112243

488

x 1

D2646

Manufactured

No

270

Each

60.0000

1

1



Aft Cap



x 1 10/11/10

Location

Loc Qty

Loc Code

FP-4

51

57332

51

fp5

4

61752

4

FP6

5

52663

5

x 1

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 8

Work Order ID: 62280



Parent Item: D206-642-541



Parent Item Name: Replacement Skidtube

Start Date: 9/24/10

Required Date: 10/08/10

Start Qty: 1.00

Required Qty: 1.00

D3413-1

Manufactured No

270

Each

36.0000

1

1



Ring

HL 10/1/18

Location

Loc Qty

Loc Code

ST473

36

51586

1

53446

15

61322

20

K1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN CP	DRAWN BY PH	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED H	APPROVED H	DRAWING NO. D3274	REV. D SHEET 1 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY SCALE NTS	
A	04.03.15	NEW ISSUE	
B	04.08.09	MOVE SADDLE HOLE: 42.14 WAS 42.76	
C	05.03.16	ADD -043; NEW INSERTS	
D	06.12.19	NEW INSERTS, SS WEARSHOE + GASKET	

RELEASED

07.02.12

DEO ATTACHED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENTS
WITHOUT NOTICE
WORK ORDER
NO. 62280

CL1019124

Qty -041	Qty -043	Part Number	Description
X		D3274-041	SKIDTUBE ASSEMBLY
	X	D3274-043	SKIDTUBE ASSEMBLY
1	1	D2600-1-240	EXTRUSION
1	1	D2646	AFT CAP
12	12	D2649	CROSS BOLT SPACER
12	37	D3275-1	CROSS BOLT SPACER
1	1	D3282-041	FLOAT WEB
1	1	D3285-1	CAP
1	1	D3413-1	RING
1	1	D3415-041	NUT PLATE
1	1	D3535-15	WEARSHOE
1	1	D3535-23	WEARSHOE
1	1	D3535-35	WEARSHOE
1	1	D3535-39	WEARSHOE
1	1	D3536-15	GASKET
1	1	D3536-23	GASKET
1	1	D3536-35	GASKET
1	1	D3536-39	GASKET
9	9	D3537-1	WEARPAD
1	1	D3537-3	WEARPAD
78	78	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
80	80	AN3C4A	BOLT
1	1	AN4C5A	BOLT
1	1	AN960C416	WASHER
80	80	AN960C10L	WASHER
2	2	CCR264SS3-3	RIVET
2	2	CR3212-4-03	RIVET
2	2	NAS1515H3L	WASHER

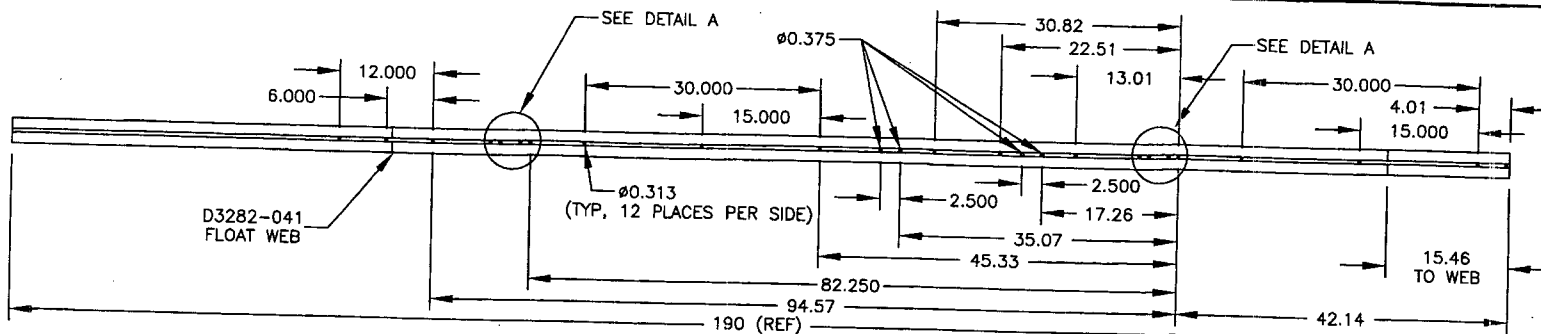
GENERAL NOTES:

1. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2. DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 7 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
3. ALL HOLES DRILLED ON CENTERLINES.
4. BOND D3282-041 FLOAT WEB INTO D3274-1/3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015. ENSURE HOLES LINE-UP.
5. WELDING TO BE DONE PER DART QSI 004.
6. FINISH: - ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1
- POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
7. DRILL Ø0.297 HOLES FOR ALS7-1032-130 INSERTS USING DT3274-1T2 BEFORE FINISH. INSTALL ALS7-1032-130 INSERTS AFTER FINISH. SEAL WEARSHOE BOLTS WITH SIKAFLEX -241/-291.
8. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

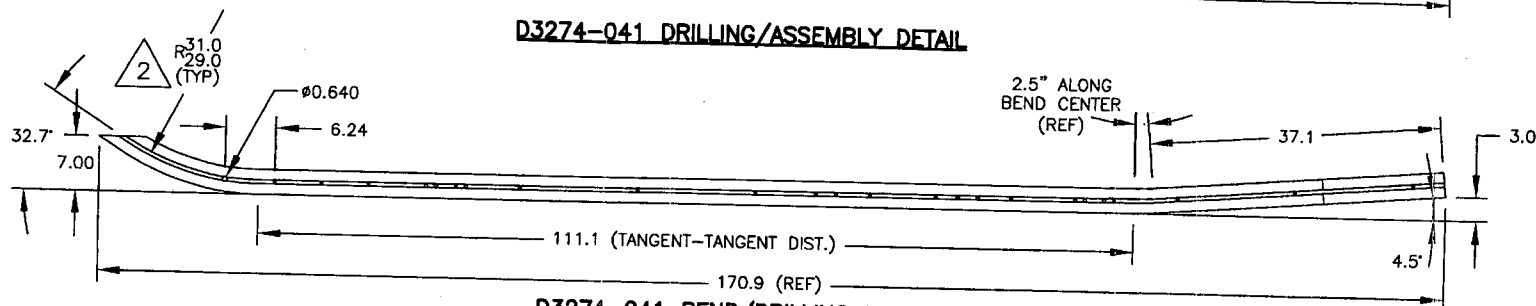
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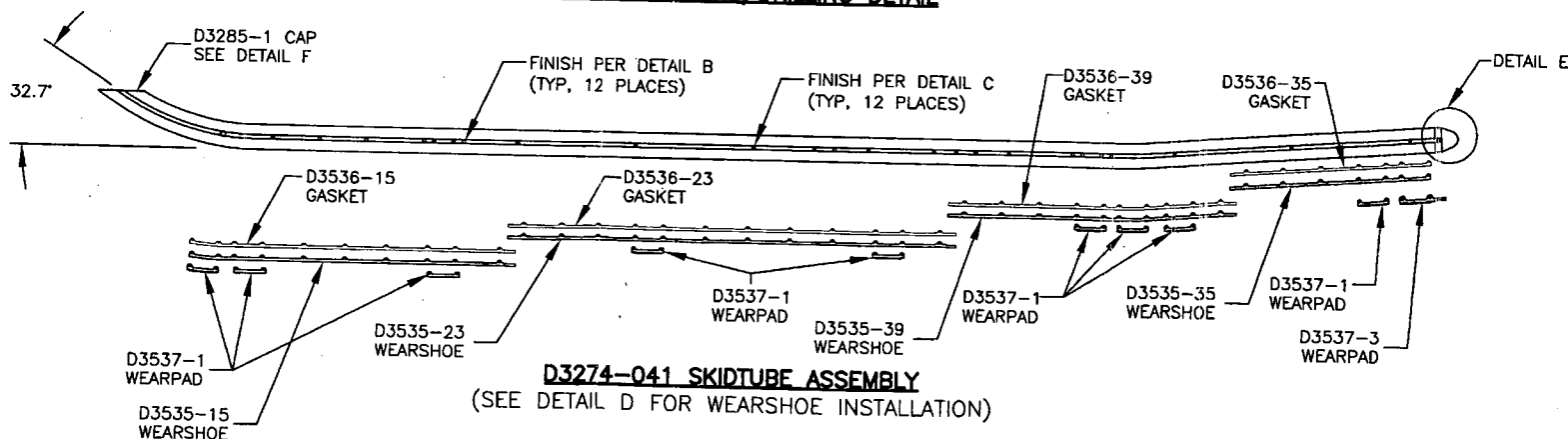
DEO ATTACHED



D3274-041 DRILLING/ASSEMBLY DETAIL



D3274-041 BEND/DRILLING DETAIL



D3274-041 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

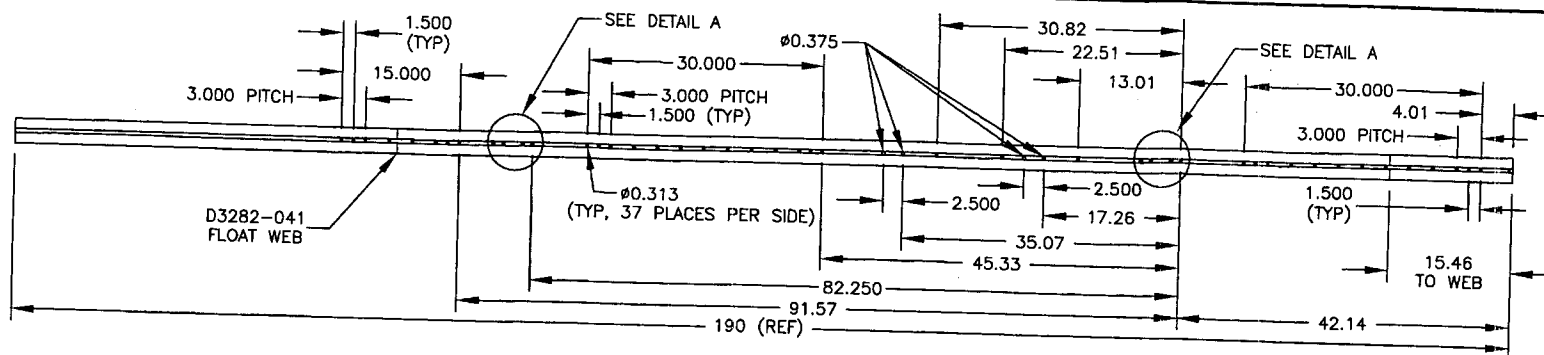
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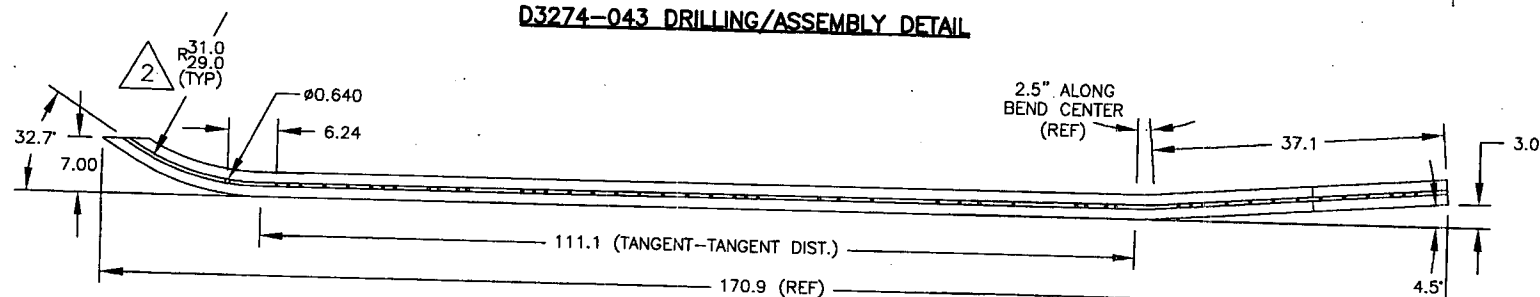
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DESIGN CP	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, MA	
CHECKED #	APPROVED #	DRAWING NO. D3274	REV. D SHEET 2 OF 4
DATE 06.12.19	TITLE SKIDTUBE ASSEMBLY		SCALE 1:15

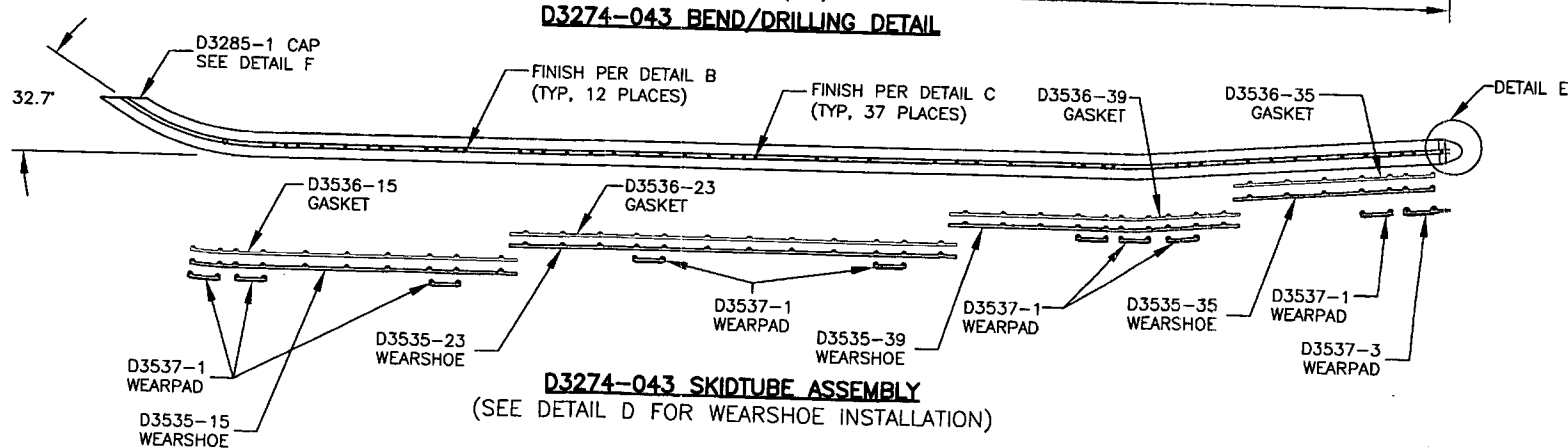
DEO ATTACHED



D3274-043 DRILLING/ASSEMBLY DETAIL



D3274-043 BEND/DRILLING DETAIL



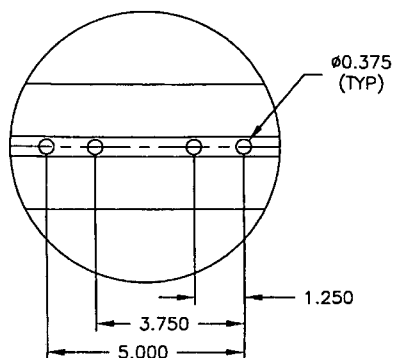
D3274-043 SKIDTUBE ASSEMBLY
(SEE DETAIL D FOR WEARSHOE INSTALLATION)

RELEASED

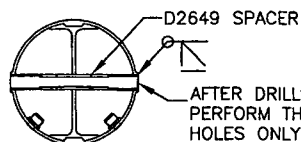
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DATE		06.12.19		DRAWING NO.		D3274
				FILE		SKIDTUBE ASSEMBLY
				REV. D		SHEET 3 OF 4
				SCALE		1:15

DETAIL A: DRILL DETAIL

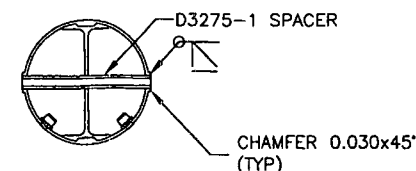


DETAIL B FOR 0.375 HOLES ONLY

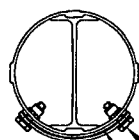


AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR 0.375
HOLES ONLY:
1. CHAMFER HOLE 0.030x45°
2. INSERT D2649 SPACER
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE TO 0.313x0.75 DEEP

DETAIL C FOR 0.313 HOLES ONLY



DETAIL D

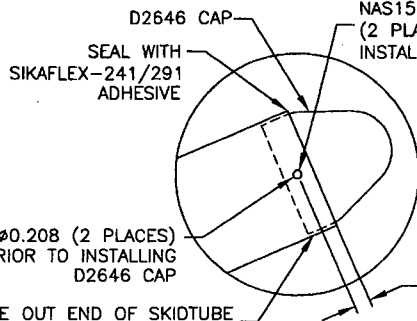


ALS7-1032-130 INSERT (1)
AN3C4A BOLT (1)
AN960C10L WASHER (1)
(78 PLACES)

GASKET/WEARSHOE/WEARPAD (REF)

DETAIL E

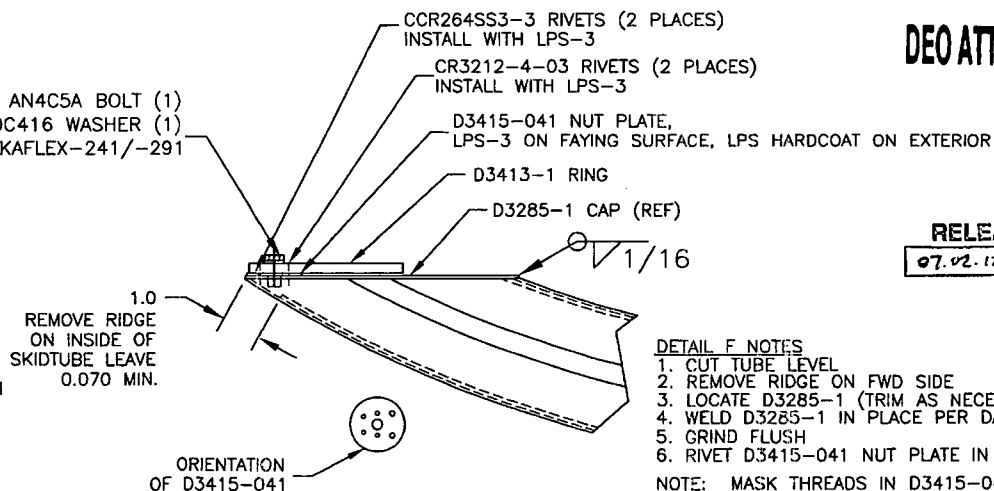
AN3C4A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(2 PLACES)
INSTALL WITH SIKAFLEX-241/-291



0.208 (2 PLACES)
DRILL PRIOR TO INSTALLING
D2646 CAP

BORE OUT END OF SKIDTUBE
TO 0.75 DEPTH AND 0.070 WALL

DETAIL F: END FINISHING DETAIL



DEO ATTACHED

RELEASED
07.02.12

DETAIL F NOTES
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE
NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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CHECKED H	APPROVED H	DRAWING NO. D3274		REV. D SHEET 4 OF 4
DATE 06.12.19		TITLE SKIDTUBE ASSEMBLY		SCALE 1:3

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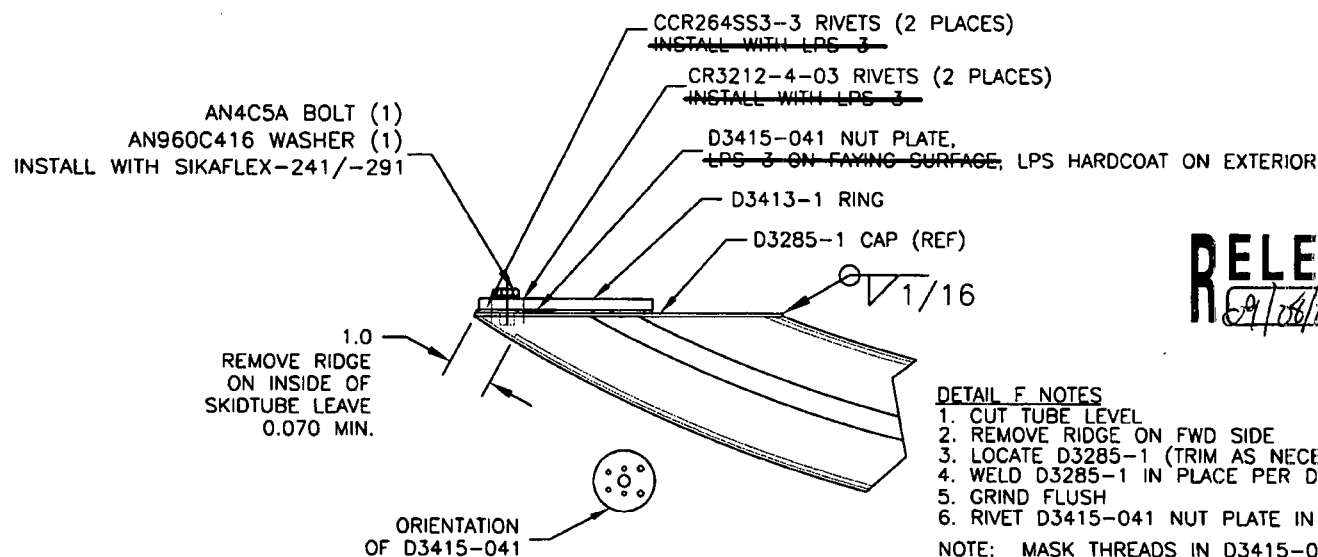
DRAWING NO. D3274	TITLE SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE USA, INC ENGINEERING ORDER	D.E.O. NO. D3274-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>L</i>	MFG. APPR. <i>M</i>	APPROVED <i>MAP</i>	DE APPR. <i>#</i>		
DATE 09.06.17	DATE 09.06.23	DATE 09/06/23	DATE 09/06/23	DATE 09.06.23		

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF SKIDTUBE.

AMEND NOTE 8: "~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES 'LPS 3' AFTER FINISH AND INSTALLATION OF INSERTS.~~
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES 'LPS PROCYON' AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER."

AMEND DETAIL F AS SHOWN:

DETAIL F: END FINISHING DETAIL



RELEASED
09/08/16

DETAIL F NOTES

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D3285-1 (TRIM AS NECESSARY)
4. WELD D3285-1 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D3415-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D3415-041
PRIOR TO FINISH

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